

Clean Water

starts with you

The DNR tests waters throughout Iowa to make sure they are meeting state water quality standards. Those standards are in place to protect drinking water, aquatic life and recreational uses, like swimming. When a stream or lake doesn't meet those standards, the stream or lake is placed on the state's impaired waters list. The DNR then creates a plan which outlines ways Iowans can help improve the water quality in their community's lakes and streams.

DNR needs your input

Every Iowan needs the help of their fellow citizens and watershed groups to improve water quality in their community. If you or your group would like to meet with a DNR staff member to discuss water quality, please contact Chris Van Gorp at (515) 281-4791 or Chris.VanGorp@dnr.state.ia.us

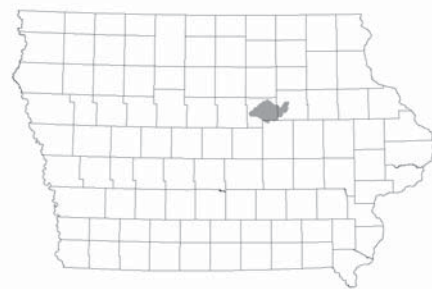


For more information on water quality improvement plans, please visit www.iowadnr.com/water/watershed/

Black Hawk Creek

Pollutant: *Bacteria*

Pollution Sources: *Human and animal waste material*



Black Hawk Creek needs your help. As you'll read below, the DNR is putting together a plan outlining the creek's problems and possible solutions. But it's up to you to make sure those solutions are put into effect. A cleaner Black Hawk Creek depends on you.

What's wrong with Black Hawk Creek?

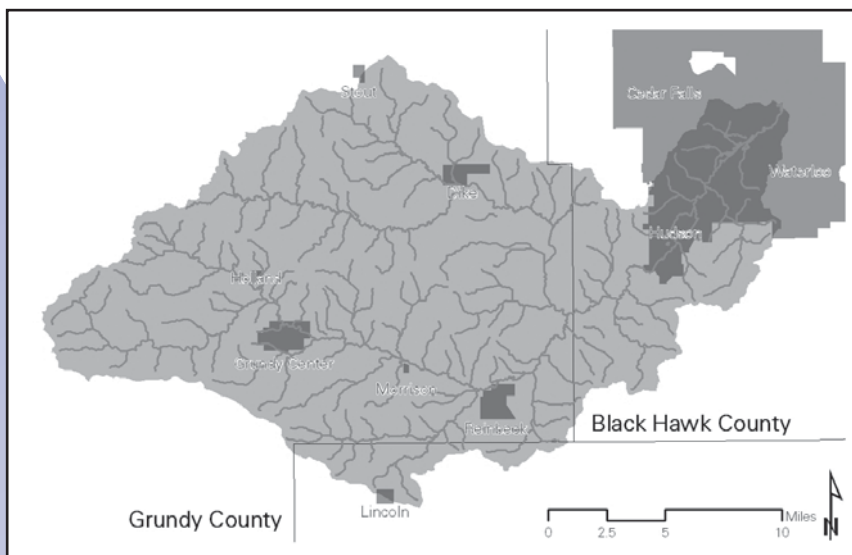
Pollution from human and animal waste, also known as fecal matter, keeps the creek from meeting its state-designated standards. Untreated waste from these sources can carry disease-causing microorganisms, called pathogens, into the water. These pathogens can make people sick.

Testing for E. coli bacteria levels can indicate if there may be fecal matter and disease-causing pathogens present in the water.

The impaired segment of Black Hawk Creek begins near the Highway 58 bridge (just north of Hudson) and ends at the creek's mouth where it flows into the Cedar River.

This 11-mile segment is located entirely in Black Hawk County, but also receives water from portions of land in both Tama and Grundy counties. The total watershed size (the area of land that drains into the creek) is 340 square miles.

It's necessary to improve water quality in the entire watershed to maintain clean water in the creek along the impaired segment.



The map to the left shows the Black Hawk Creek watershed shaded in light gray. A watershed is an area of land that drains into a body of water. In this case, all land shaded in light gray drains into Black Hawk Creek.

What is causing the problem?

Most pollution in the Black Hawk Creek watershed comes from nonpoint sources, or sources that are not easily traced back to a specific “point,” like a wastewater treatment or industrial plant.

In the Black Hawk Creek watershed, nonpoint sources include areas used to land-apply manure, pastures, and improperly connected or failing septic systems. Rainwater and snowmelt can wash waste from livestock (confined and pastured), pets, and wildlife into the creek.

To reduce the amount of fecal matter reaching the creek, changes in waste and land management will be needed. It will take time to make these changes and to see the effects.

What can be done to improve Black Hawk Creek?

The ultimate goal is to improve water quality and remove the creek from the state’s impaired waters list. To do that, sources of human and animal waste need to be cleaned up in the watershed.

Using research results and with the help of the public, the DNR has developed a water quality improvement plan (also known as a TMDL, or total maximum daily load). The plan will help reduce the amount of pollutants reaching Black Hawk Creek. A water quality improvement plan is a suggestion to local communities on how they can work for cleaner water in their area.

To meet water quality improvement goals, there needs to be an 85 percent reduction in pollution from surface runoff, or pollutants that are washed off the land and into the creek during a rainfall. There must also be a 98 percent reduction in the amount of constant pollution, such as leaking septic systems and cattle in streams.

While the DNR has done the background research and can provide technical and funding assistance, it is ultimately up to the watershed residents and businesses to take action and clean up the creek.

The DNR has suggested the following conservation practices for the Black Hawk Creek watershed:

- ◆ Control livestock manure runoff from feedlots and pastures
- ◆ Follow manure application guidelines and control runoff from crop fields
- ◆ Limit cattle access to streams and explore other water sources for cattle
- ◆ Find and replace improperly connected or failing septic systems. Up to 90 percent of septic systems in portions of the watershed draining to the impaired segment of Black Hawk Creek are estimated to be failing.

What’s Next

By helping the DNR create the water quality improvement plan for Black Hawk Creek, you’re helping form the game plan for cleaning up the creek. When it’s time to take that plan and put it into action, the DNR can offer some technical and funding assistance. But a cleaner Black Hawk Creek depends on you.

Land Use in the Black Hawk Creek Watershed

